

Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

SEPT 30, 1946



Latest British Jet Fighter: First flight photo of the Supermarine E10-44, a jet fighter of new design built by Vickers Armstrong around the Rolls-Royce Nene I direct thrust jet engine. Using a laminar flow wing and a pressurized cockpit with ejector seat, the new British fighter is described as in the "better than 600 mph. class." (See story and additional photo on pages 17-18)

Truman Establishes Air Policy Body on Wider Basis

Co-ordinating committee provides civil aviation liaison with White House.....Page 7

Miami Is Leading Gateway to South in Trade Boom

Nonscheduled carriers taking larger role in export-import activityPage 13

British Air Show Opens Drive for Big Export Trade

New military, commercial, and personal planes at first postwar exhibit.....Page 17

Industry's Gross Not Measuring Up to Expectations

Some shortages easing, but delays to date throw doubt on former optimism.....Page 20

Waco Enters Postwar Market With a Pusher Design

Unusual four-place personal plane features tall propellerPage 23

CAB Approves IATA North Atlantic Fare Reductions

Recognition of proposals indicates still lower rates expected.....Page 28

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CONTENTS

| | |
|----------------------|----|
| Washington Observer | 3 |
| Industry Observer | 7 |
| Meritor News Section | 7 |
| Special Air Services | 13 |
| Production | 13 |
| Private Flying | 23 |
| Transport | 26 |
| Editorial | 34 |

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Volume 6, No. 24

Advertisers Index

| | |
|-----------------------------|-----------|
| Boeing Airplane Corp. (FAO) | 1st Class |
| Boeing Airplane Corp. (FAO) | 21 |
| Boeing Airplane Corp. (FAO) | 21 |
| Boeing Airplane Corp. (FAO) | 21 |
| Boeing Airplane Corp. (FAO) | 21 |
| Boeing Airplane Corp. (FAO) | 21 |
| Boeing Airplane Corp. (FAO) | 21 |
| Boeing Airplane Corp. (FAO) | 21 |
| Boeing Airplane Corp. (FAO) | 21 |
| Boeing Airplane Corp. (FAO) | 21 |

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DOMESTIC

AAF network of 35 stores detaching radar stations will be completed by the end of this year.
 Major General Robert M. Webster has been appointed commanding general of Air Transport Command, succeeding Lt. Gen. Harold M. Grier, who became AAF representative to the United Nations military staff committee. ATC, faced with a personnel cut to meet economy demands, last week augmented operations for 15 days following which all divisions will be cut about 25 percent. Continental and Atlantic divisions are being merged and elimination of the European division may be in the offing, leaving only the Continental and Pacific divisions.

Rear Admiral Luis de Flores, deputy chief of Naval research, told 1946 summer of the Robert J. Collier trophy for outstanding contributions to aeronautics, is returning to civilian life Oct. 1.
 Douglas Aircraft Co. has delivered 11 converted C-54s to army. Conversion of 48 C-54s, including 18 sleeper planes and two refrigerated cargo carriers, is under way at the plants at El Segundo and Santa Monica.

Streamliners of Consolidated Vultee experts to inspect production of 13 Vespene 150s per day in October. A price reduction may be announced the end of the year.
 FINANCIAL

Thompson Products Inc. reports a loss from operations of \$7,049,431 for the 12 months ending May 31, 1946 after amortization of emergency facilities and reconstruction charges. The credits and transfers from reserves, however, resulted in a profit for the period of \$363,950.

FOREIGN

Industry of overviews in the recent month of a Trans-Atlantic Service DC-4 neo Gander, Newfoundland, to screen in any way for the shipwreck, soaked with the death of all crew members, is non-existent investigation case underway by Newfoundland authorities and officials of the Belgian airline. Paralysis rose to 37 last week, resulting in number the highest death toll of any commercial airline accident in history.



Next American contender in jet competition for the world speed record will probably be the North American fighter being built for both the Navy and AAF. Its Navy version, the XFJ-1, was recently test flown in California and is supposed to do better than 600 mph. AAF model will be known as the XF-86. North American jet bomber is nearing completion and is scheduled for test run flight in mid October.

Hawthorne Hughes eight engine flying boat will have its engines installed while their work and is expected to be ready for delivery within 180 days. Two boats are scheduled to begin. Hughes still hopes to fly the boat in its initial test flight.

British has abandoned plans to fly a piston aircraft through the transonic range and will conduct all tests with supersonic experiments with piston, multi controlled models.

Boeing will soon announce production for the Navy of jet engines and jet turbine engine "afterburners." The "afterburners" permit injection of fuel in the engine tailpipe for combustion with large quantities of oxygen accumulated in the primary firing stage. In a conventional jet engine the "afterburners" will increase thrust as much as 30% over the power plant's rated output.

Country to reports in some engine magazines that Bell's Chief test pilot Alvin (Tex) Johnson would record the jet Jack Wootton in pilot of the upcoming X-5-4 or Chrysler (NACA) Goude, also a jet test pilot, who is being prepared for the latest rocket-powered flight of the X-5-1. He is currently working out on a mission that simulates the violent control maneuvers that he is likely to encounter in the transonic range.

Recognition of the Institute of Air Transportation, New York, association of contract and merchandise unions, has resulted in appointment of Milton L. Rao of United States Aviation Corp., Long Beach, Cal., as executive vice-president, succeeding E. O. Sussman, who recently resigned. Rao is the vice president of the union, who has been associated, as reported bringing about a merger of the two groups under the Institute's name.

Initial test flights of the Navy's "Flying Panther" the radically designed XF5U-1 built by Chance Vought Aircraft Division of United Aircraft Corp. have been postponed and early start postponed.

Ground report in Newfoundland, Canada is a wartime flying and transport base, and the principal port of departure for Trans-Atlantic flights has finally become a commercial airport. Its commercial operation is a representative venture of the Newfoundland government and the night commercial airlines now using the field.

Final announcement of the Lockheed Consolidated merger is not expected for several weeks pending completion of final details of the transaction. Convair president Harry Woodcock indicated that Convair was negotiating for its power law of 15,000 employees with an increase to 32,000 scheduled before next May. More than 4,000 workers will be added at the Fort Worth plant.

Merger of Mercury Transport Corp. with California Eastern Airways, Inc., Oakland, Cal., has been completed. Alvin P. Adams, Los Angeles aviation consultant who was instrumental in organizing Mercury, has been elected to California Eastern's board of directors. Officers of California Eastern, a direct cargo carrier operating C-54s remain unchanged.

Reports of continued Russian directed activity in German aircraft plants persist despite official Russian denials and the withdrawing of such activity under the Potsdam agreement. Latest reports by reliable foreign observers, state indication of jet and rocket-powered aircraft at the Sudow Works in Halle, leaders at Dessau and BMW near Nuremberg.



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FIRST IN RUBBER

Truman Establishes New Air Policy Group on Broader Basis

Clayton, Lando co-chairmen of permanent co-ordinating committee to provide civilian aviation direct liaison with White House

Establishment of a permanent, Presidentially-sponsored Air Co-ordinating Committee will further draw the line between Government agencies working in the field of military and civil aviation and, for the first time, give civilian aviation interests a direct channel to the White House.

President Truman's Executive Order setting up the Committee emphasized that the representatives should work with the U. S. representatives to the Permanent International Civil Aviation Organization and with the State Department in establishing policies.

While, presently, under the terms of the Executive Order, ACC will also study military aviation problems, background of the Committee points to intensification of activities in the civilian field, lessening matters of military policy to the Army-Navy-Ministry Board. Only when military policies have a bearing upon foreign relations will ACC enter that area of activities.

Truman Asks Panel—The President instructed the Committee to set up an Aviation Industry Advisory Panel with membership drawn from all segments of the industry, both manufacturing and transport as well as private aviation. This panel assumes added importance due to the promise in the Executive Order for ACC's recommendations, and problems on which the various governmental responsibilities must agree, to be referred directly to the White House for action.

This is seen as the first instance in peace of an industry's having a direct line to the White House in questions as complex among government agencies.

The Air Coordinating Committee as established by President

Truman Sept. 18, succeeds a body of the same name which was set up Mar. 21, 1943 by the Secretaries of War, Navy, State and Commerce. The new Committee will consist of representatives of those agencies and also of the Post Office and Civil Air Budget Bureau representative will be a non-voting member of the Committee. Truman named as ACC chairman William L. Clayton, Undersecretary of State and chairman of the old ACC.

Lando Co-Chairman—A further indication of the strong civilian tinge of ACC is the appointment of CAR chairman James M. Lando as ACC co-chairman. CAR was

represented on the old Committee only by an observer.

T. P. Wright, CAA administrator has been executive secretary of ACC, but this post will now be filled by a full-time permanent employee. The present ACC, on the operating level, is practically a one-man effort. Hayes Tracy, secretary. The secretariat will now be greatly expanded. Tracy in all probability will remain with the organization, possibly as executive secretary.

With the first meeting of the new ACC scheduled shortly, no qualified person last week would speculate on its precise organizational structure. The industry is still studying the Executive Order and is not clear as to the representation and the functions of the Advisory Panel.

Valuable for Transport—Manufacturers, not particularly happy with the existing ACC, are in the new committee's possible alleviation of some of their problems.



NEW X-PLANE:

John Stock, chief of research of the National Advisory Committee for Aeronautics, holds a model of a new transonic aircraft which because of differences from the by now well-known lines of the Bell-built X-5 (AVIATION NEWS, Aug. 18), is believed to be the plane being built by Douglas Aircraft for the Navy, a successor in the A-7's X-5's. Stock, whose Wright Brothers Memorial Lecture on compressibility in 1944 focused attention on supersonic designs, will be a speaker at the Paris meeting of the Sixth International Congress for Applied Mechanics, Sept. 22-26. Later, he will tour research centers in Germany, Switzerland and England.

although they expect that in the main it will be more valuable for the transport part of aviation.

Manufacturers anticipate that in the future, as in the past, most of their work will be with the airlines through the Aero-Mexi-Mexican Board. In the only instance recently where the manufacturers had occasion to call upon ACC for assistance—on the recent order to alleviate the shortage of engineers due to draft regulations—the Committee was of no aid.

The transport part of the industry believes ACC will be of considerable assistance in its efforts to work with the Post Office, CAA, CAAI, STCA, as well as in connection with the Army and Navy.

Committee on International.—The present ACC has been concentrating on international aviation developments. The Australians which the U. S. delegation took to the Bermuda conference with the British were formulated by the Air Coordinating Committee. The State Department has consistently relied upon ACC for advice on international aviation policy.

The precise definition of the Committee's functions, as outlined in the Executive Order, is: "The Committee shall examine aviation problems and developments affecting the more than one participating agency; develop and recommend integrated policies to be carried out and actions to be taken by the participating agencies or by any other governmental agency charged with responsibility in the aviation field; and, to the extent permitted by law, coordinate the aviation activities of such agencies except activities relating to the execution of quasi-judicial functions."

While the existing Committee has been generally regarded as effective in international aviation poli-

cy, it had no funding authority and depended for its success upon cooperation among the agencies represented in making the Executive Order. The President issued "Only a policy-coordinating Committee representing the various aviation interests of the government and operating at a high level of authority can meet the needs of the time."

That statement is regarded as outlining the chief benefit to be expected from ACC. Instead of being a creature of Cabinet officers, it is now directly responsible to the President.

British Largest Buyers of Surplus Planes Abroad

The United Kingdom and British colonies purchased the majority of surplus U. S. aircraft sold overseas by the Foreign Legionary Commission up to June 30. F.L.C. reports total sales and leases were 4,200 aircraft of which Britain acquired 1,377. Sales amounted to \$48,924,145, and leases \$4,124,734.

Most of the aircraft disposed of were two-engine transports 2,700 with personal types (Bristol), next, numbering 849. Third were trainers, 366.

PLC points out that many foreign airlines which had not used American equipment before the war now have U. S. planes as the backbone of their operations. Among these are British Overseas Airways Corp. and Cruzeiro do Sul, a Brazilian line that before the war was American-owned. Europe was the major market for the surplus craft, 35% being disposed of there, with England, France and Czechoslovakia being the major purchasers.

British Have Lead On Argentine Sales

British aircraft manufacturers have gotten a definite jump on the U. S. industry in the Argentine market, reports from that country indicate. As of Aug. 1, Argentina had placed orders with the British for more than 200 aircraft, while U. S. producers through June had commitments totaling about 130 aircraft.

Argentina has already accepted delivery on 32 British planes—50 Miles Magister trainers, and three Vickers Viking transports—while U. S. deliveries to that country total about 40.

By far the largest proportion of the Argentine orders with British firms are for trainers or general types. Miles alone has booked orders for 150 Magisters, the second 50 of which are to be delivered shortly. Other Argentine orders in Britain are for 30 Vickers 13 Bristol Weapsons, five Short Sandringhams, three Avro Tutor II, and three Avro Yanks.

On top of this, Argentines have placed an order for \$3,000,000 worth of orders with the British for personal planes.

Orders with U. S. firms and from surplus stocks are far about 180 personal planes, two B71s, 40 Douglas DC3s and DC4s, and PB3Ys and four Martin 202s.

L. T. Merchant Named To State Aviation Post

Livingston T. Merchant has been appointed chief of the Aviation Division of the State Department. Taking the post from which Stakeley Mercer resigned, several months ago Joe D. Waldman, who has been acting chief, is returning to foreign service and will assume



BENDIX EXPERIMENTAL HELICOPTER.

The Bendix Model K, one-man experimental helicopter, shown in flight without hub. The K has served as a test model for the four-place Model J planned for commercial use. The K has made flights up to 25 feet altitude and has a speed of 25 mph. It is powered by a 150 hp Continental engine and features dual co-axially mounted rotors.

a foreign post probably in November.

Pending Waldman's leaving, he will continue as associate chief of the division. John Bell remains as assistant chief in charge of air transport. John Paul Norrington has been named assistant chief in charge of a new function, Plans and Coordination. Two posts remain open, as heads of the facilities and of the technical services.

The jobs formerly filled by Percy Warner, training and technical, and Frank Jarvis, surplus property disposal, will not be filled under the reorganization. Stephen Landford remains with the Aviation Division as legal adviser.

Goodyear Buys Six K-type Blimps for Hemoforming

Six dismantled K-type Naval dirigibles will be shipped to Westport, La., at Alamogordo following their purchase from the War Assets Administration by the Goodyear Tire and Rubber Company. Three of the ships are at Lakehurst, N. J., and three at Moffett Field, Calif.

Three times as large as the L-type ships operated by Goodyear from 1929 to the beginning of the war, the Ks require 450,000 cubic feet of helium lifting gas as compared with 125,000 in the L ship,

which were used largely as training ships during the war. Each K is 415 feet long and stands 50 feet high on its landing wheel.

Goodyear officials indicated that none of the K ships would be in operation before winter and perhaps not until next year. The first of the L-type ships previously acquired by Goodyear is now on a three-months hemoforming year through the Middle East, while a second is being re-assembled at Los Angeles for use in the west coast. A third will be based at Washington, D. C.

Star Guided Bombs

Self-navigating aerial weapons are guided by star stars at 5, 100-mile-on hour speeds "run in the circle" according to Lawrence D. Bell, president of Bell Aircraft Corp. Mr. Bell told a meeting at Western New York leaders in Buffalo that such a weapon successfully may have a range of from 5,000 to 10,000 miles.

The future will bring long-range guided missiles carrying covers under which will give them their own autonomous navigation, he declared. "We don't know all the answers as yet but the pattern is there."

Navy Flight Tests Pressure Navigation

Lockheed Neptune will fly from Perth to U. S. in provide data for future operations.

Using a relatively new-type engine, and a new system of navigation, the Navy will attempt to gather data on a number of conditions present during long-distance operations with a 3,600 mi. nonstop flight by a Lockheed PV Neptune from Perth, Australia, to the United States.

Under construction specifically will be methods to extend the radius of Navy patrol missions, the "single heading" pressure pattern system of navigation, and problems of fatigue and endurance. A by-product of the flight may be a new long-distance flight record. The Perth-U. S. distance is 3,600 mi. The PV is to be used has been stripped down and the entire aircraft fuel will be left.

Banned Fuel.—No fuel will be used on destination, but reports speculate that the plane may try to reach Washington, instead of landing on the West Coast. This would cause the distance contemplated for the 3-30 day last week mail service to be a light to Cairo, 18,000 miles away.

All radio has been removed from the Navy plane, which is called the "Triton," "Turtle," and the plane will be started by celestial navigation and the pressure pattern method which is linked to what is termed a single heading course.

Pressure pattern flying has been under investigation by the Navy. Army, Pan American Airways and TWA since about 1945. In the process, it is following the outer range of low barometric pressure areas to take advantage of tail winds.

The low areas are predictable in advance by weather forecasts and the plane is arranged to keep the center of the following winds.

Tail by Turtle.—From this, the Navy has developed the single heading system which will be given its first extensive trial by the "Triton" "Turtle" under the most realistic conditions. The barometric pressure will be taken at Perth and at a West Coast point. From that will be determined the best altitude for the plane to fly to take advantage of the winds present in the extension of the low pressure areas along the route.



AAF MECHANICS DELIGHT:

Republic's Thunderbolt (P-48) recent addition to the AAF stable of jet fighters is believed to show how the rear section of the fuselage is quickly replaceable to permit replacement of the General Electric TG-100

tail jet engine in 30 minutes. Thunderbolt is currently the fastest plane in the AAF being officially clocked at 657 mph with further speed gains scheduled as an attempt to break the world speed record.

The location of the laws can be determined by weather forecasts accurately and their altitudes predicted within 100 feet. As long as the plane flies the procedures, altitudes and both the laws it will be on course. Thus it will fly a circle heading the whole course. Reliance to distant navigation and compass readings will furnish a check.

The novelty about using this system on the Perm-U 3 flight is that the plane will be flying in the Southern Hemisphere, the Northern Hemisphere and through the "doldrums" along the Equator. It does not, as is much known, that low pressure areas at along other segments of the route.

One of Them—The Neptune, a \$1,000-h development of the Yem-U, is powered by two Wright 3100 engines of 3,300 hp, each. It has a span of 100 ft. and a high speed of better than 300 mph, and an operational range with extra gas tanks in excess of 5,000 miles.

Named crew of the Neptune is six, but the "Turtle" will carry four. Commander Thomas D. Davis,



SUCCESSOR TO DUCK

Due to replace the Navy's J2F Duck utility amphibian is the *KA-1*, built by Cessna Aircraft Corp., Valley Stream, Long Island, N. Y. This recently was test flown. Two new features for Navy amphibians are the triple landing gear and the retracting of the main gear into the wings instead of into the hull. Plans are provided by a 1,000 hp engine and is equipped with JATO. With a carrying capacity of greater than 2,000 lb., it can carry six as a personnel transport, or three later and three evolutionary crew as an ambulance plane, (Navy photo)

captain Comdr. W. B. Field, Lt. Comdr. R. H. Tabor and Comdr. E. P. Barker, all experienced pilot-ship pilots. They will undergo physical examinations at Perth, and again upon landing. The records of these tests, together with evaluation of devices in the plane are expected to furnish further information on future long-range flights.

Aircraft Pay Up

Heavy wage rates in aircraft assembly and parts plants in June were up an average 3.5 percent over last year, and rates in aircraft engine plants were up an average 3 percent, according to the Bureau of Labor Statistics.

During July, hourly rates increased an average 2.5 percent in aircraft and parts manufacturing plants and an average 2 percent in aircraft engine plants, bringing the average hourly wage rate in the aircraft assembly and parts industry to \$1.50 in June, and the average hourly rate in aircraft engine plants to \$1.40.

The shorter work week in effect last June, however, kept weekly "take home" pay in both aircraft assembly and parts and engine plants below last year's levels.

Weekly "take home" in aircraft assembly and parts plants averaged \$15.50 during June. This was 3.1 percent less than the "take home" average for June a year ago, when the work week was 44.5 percent longer.

Weekly "take home" in aircraft engine plants averaged \$15.10 during June. This was 3.1 percent less than the "take home" average for June a year ago, when the work week was 4.5 percent longer.

Wright Gets Medal

T. P. Wright, Administrator of Civil Aeronautics, has been awarded the Medal of Merit by President Truman for "exceptionally meritorious conduct in the performance

of outstanding services to the United Nations since June, 1944," as a member of the National Defense Advisory Council, for work on WPA, CAA and the Strategic Bombing Survey.

FLC Will Sell Foreign Basic Plans for Imports

Because of the short supply of surplus transport aircraft in the U. S., State Department has authorized the Foreign Liquidation Commission to sell to U. S. citizens

Chute Sale

War Assets Administration is placing on sale shortly approximately 40,000 surplus parachutes at prices ranging from \$9 to \$15 each and \$70 to \$140 each.

Original manufacturers, acting as WAA agents for sale of the chutes are: Eagle Parachute Corp., 42 North Quinn Street, Lancaster, Pa.; United Air Chute Co., 1079 Jefferson Avenue, Buffalo, N. Y.; Pioneer Parachute Co., Forest Street, New Haven, Conn.; Swift Parachute Co., Labor & Main Street, Trenton, N. J. In addition, there are over 100 distributors selling as WAA agents.

The parachutes, although certified as serviceable by the Army, must be inspected and repacked by a CAA licensed parachute rigger before they can be used.

for exportation to this country: C-54s, C-47s and C-46s overseas.

There will be no immediate effort of the order under as C-54s and C-46s are considered as FLC stock and have those types available. However, it is expected about 30 C-46s a month in England and is expected to obtain some in Germany shortly.

The only C-54 FLC presently has for sale is located at Gander Airport, Newfoundland. This is a model E and is damaged. Until Oct. 4, it will be for sale to veterans. Price is \$75,000, where and as is.

All C-46s which FLC can now sell far are in this country will be sold abroad.

Northrop Unveils Trimotor Cargo Plane

High wing monoplane designed for use in South America on small fields, cruising speed 185 mph, with five-on-load.

Designed to extend advantages of a transport to the smallest airfields in the United States and to many isolated localities in South America and other countries, the Northrop Pioneer, now illustrated in a trimotor cargo airplane arranged last week, is expected to take off with a five ton useful load in 100 ft. and land with an equivalent load in 100 ft.

Northrop Aircraft, Inc., last week exhibited a wooden full-scale mockup of the new cargo plane at the Hawthorne, Calif. plant and announced that the prototype air-

plane was scheduled for its maiden flight in November.

Conventional gear—The Pioneer is a high-wing high-wing monoplane with 30 ft. wingspan, and 40 ft. 7 in. long fuselage. Fixed conventional landing gear with 21 ft. 3 in. track is attached to the outboard engine nacelles, and by struts to the bottom of the fuselage.

The Pioneer is designed for use of either 550 hp. Wright engines or 600 hp. Pratt and Whitney R-1340 engines. Removable ailerons, and very large flaps, similar to those of the Northrop P-41 Hawk Wildcat, make the Pioneer, permitting 80 mph. stall speed with full 30,000 lb. gross weight. Heavy-duty brakes are provided for short landing run. Brakes and wing controls are only hydraulic-operated equipment.

Other features include: cargo door, 35 in. by 70 in. at the same height as standard side door; landing hatch, permits loading at levels up to 24 ft. inside of door to ground is 6 degrees, short half of usual conventional landing gear planes, for easier loading.

Memorabilia—Bentley is a 20-passenger or a combination of passengers and cargo, if desired. Maximum cruising speed is quoted as 185 mph. Service ceiling at 24,000 ft. and range at 1,500 miles.

The plane is to have a 15,000 lb. rating with two engines. With less than maximum load (5,000 lb. useful weight) the Pioneer is expected to take off in 100 ft.



VISITING COMPETITOR:

Directed toward the South American market for cargo planes is the British-built Bristol Freighter, shown at LaGuardia Field, New York, with a holdful of British automotive vehicles. The freighter is on a tour of the U. S. and Latin America. With a gross weight of 17,000 lb., it carries a payload of 2,075 lb. and is powered by two Hercules 1,775 hp. engines (Mortis & Kelsom photo).

The tractor installation, first in many years on an American plane, is designed primarily as a safeguard in rugged country, since the plane still has four fuselage doors, with one engine out.

CAB Examiners Urge Copter Taxi Service

Yellow City, Cal., recommended for routes between Cleveland and Chicago, extensive feeder system favored.

One of the most significant recommendations in CAB report was that the first-time CAB examiners recommended evaluation of helicopter services.

In early approval of Yellow City Co. applications for this type of passenger service in the Cleveland area, the Great Lakes Area report of Examiners William F. Conick and Richard A. Walsh took note of many major developments in helicopter design, production and acceptance by CAA.

Yellow City, Cal., established by CAB, propose use of four-place Sikorsky helicopters over low routes between Cleveland airport and downtown sections of the city and between the airport and the suburbs of Euclid, via Shaker Square.

Also favored in the report was establishment of an extensive feeder system extending from Pittsburgh to the east to St. Louis as the west, and from Chicago and Detroit to the north to Louisville and Memphis on the south. Operators recommended were: Great Lakes Airlines, Inc., Columbus, O.; Parke Air Transport, Inc., East St. Louis, Ill.; Roscoe Turner Aeronautical Corp., Indianapolis, Ind.; Trans-Ohio Airlines, Inc., Indianapolis, Ind.

Recommendations follow:

American—New routes between Cleveland and St. Louis, via Indianapolis, subject to restriction.

Chicago and Southern—New route between Chicago and Detroit, via intermediate points, subject to restriction.

Eastern Air Lines—Inclusion of Newberry and Terre Haute on AM 50 subject to restriction.

TWA—Inclusion of Columbus on AM 50.

United—Inclusion of Fort Wayne on AM 1.

Great Lakes Airlines—Route between Cleveland and Columbus.



THUNDERJET CHASING RECORD

First flight photo of Republic's Thunderjet (Poli) recently engaged in flying to break the world speed record at 514 mph, an official speed run over the AAF Muroc Lake course. Best official Thunderjet time to date has been 4:17 mph.

via intermediate points, and between Pittsburgh and St. Louis via intermediate points including Cleveland.

► **Pack Air Transporters**—Two routes between Chicago and St. Louis, via intermediate points.

► **Ryanair Transporter**—Two routes between Chicago and Indianapolis and between Indianapolis and Memphis, Indianapolis and Louisville, and Indianapolis and Cincinnati, all via intermediate points.

► **Town-O-Hot Airlines, Inc.**—Routes between Detroit and Washington, W. Va., and Toledo and Hamilton, all via intermediate points.

► **Yellow Cab Co. of Cleveland, Inc.**—Helicopter routes between Cleveland airport and downtown Cleveland and between Cleveland airport and the suburb of Euclid, via Shaker Square.

TWA Pilots Reject Pay Recommendation

Not finding board's pay formula varied down because of "undue gain," some carriers accept.

Rejection by TWA pilots and co-pilots of a four-day-old board's recommendation to pay for pilots of four-engine equipment immediately caused speculation on the possibility of a strike, but there was no positive indication last week from the Air Line Pilots Association (ALA) whether such a step would occur.

ALA threatened a strike in January and again in April (Aviation News, Jan. 31 and April 32) before negotiations began, but David L. Beckhe, president of the union, had no comment on strike possibilities after announcement of the rejection except to say "that requires a lot of planning." Nevertheless,

he thinks, a strike started the only remaining income of the pilots would be spent on their demands.

Beckhe, who stated that the board's pay formula had been turned down by the pilots—although the airlines have accepted it—because of its undependability, said ALA did not understand it, as he one else seemed to. "That's a word" came from the board, he added, despite the Association's request for clarification, and it was difficult to know "what we were rejecting or what we were accepting."

TWA, American and American Overseas have announced acceptance of the board's proposals, which included an increase of

Accident Probed

Preliminary investigation of the two-fatal accident which severely damaged a Pan American airplane. Cancellation while flying at Helena, Ark., airport last week indicated the mishap was not caused by any structural failure, PAA officials have now accepted.

The accident occurred when the two main wheels of the Constellation's landing gear came very close to the runway, dropping the plane on its tail and breaking the back of the fuselage. All passengers and crew members of the Los Angeles-based plane escaped serious injury.

Whether bringing caused failure of the landing gear or whether the gear had not yet been fully properly was not established by CAA investigation who are also looking into the possibility that a member of the flight crew inadvertently opened the wheel-retracting mechanism.

SPM on international pass over the previous base pay of \$3,000 annually and adjustments in hourly and mileage rates for pilots in aeromedical service.

Other carriers reported to have gone along with the recommendations were Boeing, Chicago and Southern, Delta, Eastern National, National, PCA, United and Western.

Beckhe and ALPA stood by its original contention that the board was dealing only with the TWA case and expressed belief that acceptance of the formula by other airlines had no legal standing, and could be effective only if accepted by the companies and the pilots both and written into their contracts.

Kellett Ending Its Commercial Output

Extreme shortage of materials, which has been a major problem throughout the aircraft manufacturing industry for months, last week caused Kellett Aircraft Corp. to withdraw from commercial production. Company will continue its work on helicopter development, President W. Wallace Kellett announced.

Beckhe, affected by the Kellett decision totals \$8,000,000 for a variety of non-aircraft products as well as subsidiaries for other aircraft manufacturers. The reduction of Kellett has been serious for months, with one report stating that the company has had items 90 percent completed in warehouses awaiting arrival of parts or materials.

In looking to partial completion items for which it had orders, Kellett dropped its working capital, leaving the material shortage would eliminate and make deliveries possible. A short time ago it applied to the Reconstruction Finance Corp. for a loan to enable a continuance of production operations. A loan in the amount of \$750,000 has been approved, but for the present Kellett will limit its activities to development.

Company has underway work for the Army on three separate helicopter projects. Later, Kellett may consider a return to production.

Earlier this year, Kellett leased from War Assets Administration the war-built plant at North Wales, Pa. Kellett will continue occupying the facility.

SPECIAL AIR SERVICES

CHARTER NON-SCHEDULED INTRASTATE

Miami Now Leading Air Gateway As Latin-American Trade Booms

Seven of eight largest air cargo ports handle business to South and Central America; unscheduled carriers taking larger slice of traffic.

By CHARLES L. ADAMS

A booming business with Latin America in which unscheduled carriers are playing a role of growing importance has established Miami as the center of U.S. export and import activity. From the standpoint of volume, half of this country's export and import cargo is shipped to and from the continent, and 53 percent of the imports landed through the Florida city in June, latest month for which statistics are available.

Consolidated Bureau reports show that of the eight top foreign air trade centers in the country, only La Guadalupe Field, N. Y., does not rate in position favorable to movement with the Caribbean area and Central and South America. During June, 973,000 lbs. of air exports valued at \$4,346,000 passed through Miami, compared with 1,945,000 lb. worth \$14,577,000 for the nation as a whole.

► **Ports Listed**—Other principal export ports for both consolidated and unscheduled carriers during June: Lufthansa, 510,000 lb. worth \$1,902,000; Braniff, 300,000 lb. worth \$5,004,000; St. Petersburg, Fla., 132,000 lb. worth \$47,000; San Antonio, 45,000 lb. worth \$271,000; West Palm Beach, Fla., 35,000 lb. worth \$127,000; New Orleans, 32,000 lb. worth \$128,000; and Fort Worth, 25,000 lb. worth \$423,000.

Volume of all air imports during June totaled 515,000 lb. worth \$4,845,000. Miami led with 112,000 lb. worth \$1,247,000, followed by Buzorg, Mex., 100,000 lb. worth \$1,247,000; Mexico City, 100,000 lb. worth \$1,247,000; and San Juan, P.R., 100,000 lb. worth \$1,247,000.

Both air exports and imports were at new peaks during June. Overall exports were up 15 per-

cent in value and more percent in weight compared with May, while imports rose almost 60 percent in value and 50 percent in weight during the same period. New highs in air trade were registered in five of the first six months of the year.

► **Medical Chief Expert**—Major exports during June included canned tomatoes (shipped weekly through Miami) valued at \$1,000,000; poultry worth \$1,000,000; fabrics and clothing worth \$1,000,000; and vehicles and machinery worth \$1,000,000. Exports of food and non-perishable items worth \$1,100,000; farm and machinery worth \$1,100,000; and vehicles and machinery worth \$1,100,000 led the nation's exports from the standpoint of value, with most of them passing through LaGuadalupe Field. Miami was first in all imports of bulkier commodities such as meat and leather products, fish and fruit.

Example of the increasing participation of unscheduled air carriers in Latin American business is presented in a recent CAA report.



► **Southward Bound**—Rapidly expanding air commerce with ports in the Caribbean area and Central and South America is attracting increasing numbers of unscheduled and contract airlines. A Lockheed Lodestar operated by Skyways International, Inc., Miami, one of the larger unscheduled carriers operating to Latin America, is pictured above.

operation by Skyways International Inc., Miami International Airport. During the past 12 months the company has flown over 145 round-trip cargo flights and a few passenger trips to nearly all parts of Latin America.

► **Flies Both Coasts**—Skyways flies an east coast South American route including Miami-San Juan-Camden-Georgetown-San Juan-Buenos Aires-Jamaica-Sao Paulo-Manizaba-Buenos Aires, and a west coast route including Miami-Jacksonville-Baltimore-Buenos Aires-Guayaquil-Lima-Arica-Santiago-Buenos Aires-Houston. Equipment on hand consists of three Lockheed Lodestars, three DC-3s and one Curtiss Commando C-46R.

During May and June the company flew 254,023 plane miles carrying 58,600 lb. of cargo, 213,000 passengers and 415 passengers 799,000 passenger miles for total revenue of \$450,410 and \$107,738 net profit. Employees numbered 125 at the end of June.

Future plans include extensions to India via Natal, Australia, Dakar, Casablanca and other ports and trips over the North Atlantic to Madrid. Company officers are Robert J. Burgrum, president, Joseph T. Kennedy, vice-president, James Ryer, vice-president, George Christof, secretary, and C. J. Webster, treasurer.

Film Delivery

A one-man movie distribution service was launched at Anchorage, Alaska, recently by Harry Haglund, who is flying film to remote points in the territory under the commercial trade name Skyway Pictures. A regular contract is being negotiated with the following purchase of a biplane.

Emergency Air Cargo Shipments Increasing

Maritime strike wins coke shipments to Cuba by air at cost of \$4,200 for cargo worth \$87.50.

Like the coal shortage which forced curtailment of nonessential rail shipments last May, the recent two-week-long machine strike threw emergency business to the undersupplied airlines and further awakened U.S. industry to the value of rescheduled and contract air services.

Prospects of heavy interconnector airfreight tonnage, involving nationwide shipments of goods not normally regarded as "air candidates" because of their low value-weight ratios, are extremely good, according to some industry observers. A confluence of unrelated labor relations affecting surface transportation, the shortage of boats and freight cars, and the emphasis of low interconnects in many lines' new product lines are expected to create considerable quantities of goods by air that would normally be trucked or shipped by rail.

The push to get source countries' articles to market for the holiday trade is expected to account for considerable airfreight business in November and December.

Strongest of cargoes moved by air during the recent lull was a load of cake earned from Teterboro, N. J., to Camaguey, Cuba, by Wilis Air Service, Inc., to keep the mills of the Pinaros Sugar Co. in operation. Delivered in 84-lb. sacks to the Teterboro airport, the 7,000 lbs. of fuel cost \$27.58. Air transportation to Cuba cost around \$1,386.

[illegible]

Strategic Cargo: Closing of U. S. ports by shipping strikes during recent weeks was responsible for the shipment of 7,800 lb. of coals by air from Petersburg, N. J., to the Comagony, Cuba, mills of the Premium Sugar Co. The charcoal-seeded fuel, loaded in 20-lb. sacks, was carried by Walla Air Service, Inc.

of \$19.88 and has offered \$44. Company

Intercontinental Air Freight Inc., Lancaster Airport, Lancaster, Pa., during July and August received 176,486 lb. of mail, valued at \$125,000 and \$123,000, respectively. Mail volume between this point and DC-BOW during the period (General Operations Agency, in February, 1964) which came from New York, New Orleans, Columbia, San Francisco, San Diego, Fla., and Kingston, Jamaica, averaging two round trips weekly. Flights have been operated as follows: New York and San Francisco to New Orleans and Kingston; New Orleans to Kingston; Kingston to New York and San Francisco; and New York to New Orleans and Kingston. Other flights, originating and terminating at Kingston, are operated as follows: Kingston to New York, New Orleans, and San Francisco; New York, New Orleans, and San Francisco to Kingston. **General Manager:** R. J. BARNES, JR. **Secretary:** R. J. BARNES, JR.

Atlantic Gulf and Western Corp., Dallas, Texas, is in a bidding process for a contract to build a 100,000-sq-ft, 10-story office building in the Dallas area. The building is to be built on a 10-acre site in the Dallas area. The building is to be built on a 10-acre site in the Dallas area. The building is to be built on a 10-acre site in the Dallas area.

Airbus Flight and Passenger Services Inc., New York City, operating from Kennedy Airport between May 1 and July 21, has 20,000 seats daily carrying 143 passengers and 10,000 cargo. The airline has 200,000 sq ft of cargo and 400 net sq ft. Worldway was by National Air Products Corp. New York, company officials said it cost and was profitable. The airline has 100 C-47s and one C-54 on its roster. All were located 1947-50. F. E. Baker, president, is a former U.S. Air Force pilot, and the company is a former U.S. Air Force pilot.

Alaska Airlines Alaska Airlines is operating in 1950 and has also been a carrier to 1972 passengers and 10,000 cargo. The airline has 200,000 sq ft of cargo and 400 net sq ft. Worldway was by National Air Products Corp. New York, company officials said it cost and was profitable. The airline has 100 C-47s and one C-54 on its roster. All were located 1947-50. F. E. Baker, president, is a former U.S. Air Force pilot, and the company is a former U.S. Air Force pilot.

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Air Freight Issue Looms Before CAB

Right of the scheduled trunklines to carry airfreight under certificates issued years before the banning of bulk cargo became a reality will be challenged in CABA's airfreight case, set for hearing Nov. 12.

Petition of the Independent Airfreight Association asking leave to intervene indicated the group

week in interpretation of the word "property" as contained in the surface's guarantee certificate authorizing carriage of "persons, property and mail." The question whether "property" includes bulk freight will be brought to the hearing regarding use of surface's A-1 permit to intervene, since four of its five members are already in the case.

One IAA member, U. S. Airlines, testified on the point in the Boston-New York-Atlanta-New Orleans route case and intends to present further argument on the subject in the aircraft case.

Air Task

Plans for early inauguration of an air taxi run from Pittsburgh's Point to City-County airport and for later service to Greater Pittsburgh airport are being developed by Guy Miller, who intends to operate six four-place Republic Seaborn from a ramp on the Monacaqua Drive at the Point. The service would be set up to cut surface travel from hotel to airport by two-thirds.

AAXICO Petitions
CAB for Exemption

Carrier seeks scheduled service pending decision on certificate, increased over construction.

Apprehension over its ramshackle status in the light of CAB's Trans-Marine and Page Airways decisions last June and in view of further restrictions proposed by the Board in Amendment No. 3, Section 282 I of the Economic Regulations, has brought American Air Export and Import Co. in a crossroad where its future may be decided.

AXCPO has asked CAB for a temporary exemption authorizing scheduled passenger- and mail-cargo operations over routes for which it has applications pending—Seattle, St. Y, to Miami and Havana, and Quebec to Miami and Havana. Refusal of this request, President Charles A. Carroll indicated, may force it to discharge substantially all its 175 employees, dispose of most of its equipment (seven C-47s), and curtail operations to an uneconomic minimum.



AALHC President: As the newly elected head of American Airline Transport and Inland Co., Inc., Miami Springs, Fla., Charles A. Carroll is presiding the future of his firm in spite of CAB restrictions on non-subsidized operations. Carroll is a graduate aeronautical engineer from Motre Deme, former manager of the Detroit School of Aviation and a former pilot with Pan American Airways. AALHC is one of the largest non-subsidized passenger carriers in the country. (Aeroworld News, April 21)



MUSIC IN THE AIR:

Two glassblows of glass built by Luster Pano Manufacturing Co. were tested recently from Philadelphia to Oakland, Cal., and Miami, Fla., in U.S. Airlines C-47s. Eighteen planes carrying about 7,000 lbs. were included in each shipment.

Advised by Counsel—The carrier told CAB it had been advised by its counsel that the Board's interpretation of the unscheduled exemption in the Tris-Hamne and Page Airways decisions—along with promulgation of Amendment No. 2 to the exemption—had raised the serious question of whether AAXCO itself had correctly interpreted the order.

Noting the further restrictions proposed in Amendment No. 2 to the exemption, A.AJCCO said it was reluctant to continue its operations, since by so doing it may become involved in lengthy and costly judicial proceedings and become unable to substantial per-

POpulations Outlined—Describing its service since November, 1985, AAKICO stated it had flown some 32,000 passengers, 32,000,000 passenger-miles up to Sept. 15, and had also carried 59 tons of freight. From November to Apr. 1 it flew an average of 8.8 roundtrips daily between New York and Miami, and from May to Sept. 15 it operated an average of 1.63 roundtrips daily between New York and San Juan and 3.7 roundtrips daily between New York and Atlantic City.

Challenger Asks Roare

Challenger Alderman, Edith Lee City, has asked C&B for fee increases from that point to Phoenix Ariz. and Cedar City, Utah, both of

intermediate points. George W. Snyder, Jr., Challenger president, says the company will push the applications with the support of the Utah state legislature, Chambers of Commerce, and the Utah Municipal

Tiger Line Subsidiary

Starting with two DC-3's, the Flying Tiger Line, an cargo carrier, has launched a subsidiary, Flying Tiger Transport, devoted to time-charter service for organizations who wish to charter air transportation for crews of 12 or less.

Roosevelt to Empire

Effort Roosevelt, son of the late President Roosevelt, has been elected president of Atlantic Airlines, Inc., New York. He is also vice president, alternate carrier. Dean Allagone, founder of the company, has been named chairman of the board of directors and general counsel, according to Larry S. Bennett, chairman of the executive committee.

Operating 12 daily schedules from LaGuardia Field to upstate ports, Empire also has an operation on file with IAB for a network of routes extending from Akron, Ohio, to Portland, Me., and from Pittsburgh to the Canadian border.



Proof that the Martin 2-0-2 cargo-carrier gives greater value per equipment dollar!

Look at the facts about the Martin 2-0-2 cargo-carrier. That's performance! That's economy that Martin has sold over twice as many two-engine aircrafts as its nearest competitor. Result: quantity production and a low purchase price. That's economy!

And low original cost is only part of the story. Ease of loading and maintenance, reduced flight and race-around time, high dependability and efficiency—all these help prove that Martin gives you the greatest value per equipment dollar. For complete specifications on the 2-0-2 cargo-carrier, contact The Glenn L. Martin Co., Baltimore 3, Maryland.



FAST FACTS ABOUT THE MARTIN 2-0-2 CARGO-CARRIER

- 137 push-backs figure 10,000 lbs. (Excluded)
- Takeoff Gross Weight 34,745 lbs.
- Payload Capacity 24,170 lbs.
- Maximum Operational Range 2,075 miles, 15,000 ft. (10,000 ft. with 10,000 lbs. of fuel)
- Operational Ceiling 10,000 ft. (single engine operation)
- Maximum Operational Ceiling 12,000 ft. (single engine operation)
- Cruising Speed 15,000 ft. 167 mph, Standard Rate of Turn 140 mph
- C. A. R. Service Range for Landing on Sea Level 2,000 ft. at Gross Weight 34,745 lbs.
- Takeoff Distance, over 10 ft. at Sea Level (Water Landing)
- Engines 2 Pratt & Whitney R-2800
- Fuel Consumption 110 GPH (10,000 ft.)
- Fuel Capacity 1,400 gal.
- Operating Cost Per One Mile 10¢ to 15¢
- Martin may share in cost being paid for the following aircraft: (1) C-47, (2) C-54, (3) C-55, (4) C-56, (5) C-57, (6) C-58, (7) C-59, (8) C-60, (9) C-61, (10) C-62, (11) C-63, (12) C-64, (13) C-65, (14) C-66, (15) C-67, (16) C-68, (17) C-69, (18) C-70, (19) C-71, (20) C-72, (21) C-73, (22) C-74, (23) C-75, (24) C-76, (25) C-77, (26) C-78, (27) C-79, (28) C-80, (29) C-81, (30) C-82, (31) C-83, (32) C-84, (33) C-85, (34) C-86, (35) C-87, (36) C-88, (37) C-89, (38) C-90, (39) C-91, (40) C-92, (41) C-93, (42) C-94, (43) C-95, (44) C-96, (45) C-97, (46) C-98, (47) C-99, (48) C-100, (49) C-101, (50) C-102, (51) C-103, (52) C-104, (53) C-105, (54) C-106, (55) C-107, (56) C-108, (57) C-109, (58) C-110, (59) C-111, (60) C-112, (61) C-113, (62) C-114, (63) C-115, (64) C-116, (65) C-117, (66) C-118, (67) C-119, (68) C-120, (69) C-121, (70) C-122, (71) C-123, (72) C-124, (73) C-125, (74) C-126, (75) C-127, (76) C-128, (77) C-129, (78) C-130, (79) C-131, (80) C-132, (81) C-133, (82) C-134, (83) 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Aircraft Industry Gross for Year Not Measuring Up to Expectations

Shortages of some materials causing production delays to date create doubts that manufacturers can justify cautious optimism of investment surveys.

By WILLIAM KROGER

One of the most interesting, yet little-noticed aspects, of the first reports of the Lockheed-Consolidated Volume survey was the absence of any apparent effect on the market prices of the stocks of the two companies. The obvious reason is that the report came when the market in a whole was insufficient means to discourage trading.

But another of the reasons may be the fact that aircraft shares normally do not have strong appeal to the average investor—possibly an outgrowth of the industry's own dim view of the future of war's end, a view that has not been fully justified in the existing year. (AVIATION NEWS, Sept. 2)

Apparently with the objective of encouraging that reluctance of the investor, a number of investment services recently have issued analyses of the aircraft industry which are generally cautiously optimistic in tone—although qualified with the customary "But." One of the most thorough of these has been prepared by George Bryant Woods of White, Weld & Co., 40 Wall Street, New York

City. Woods estimates the 1946 gross business of principal manufacturers as:

| | |
|---------------------|--------------|
| Curtis Wright | \$41,000,000 |
| Boeing | 100,000,000 |
| United Aircraft | 100,000,000 |
| Consolidated Vultee | 100,000,000 |
| Lockheed | 100,000,000 |
| Grumman | 100,000,000 |
| North American | 100,000,000 |
| Grumman | 100,000,000 |
| Republic | 100,000,000 |
| Boeing | 100,000,000 |
| North | 100,000,000 |
| Fairchild K & A | 100,000,000 |
| Northrup | 100,000,000 |

A group of industry executives, recently discussing the Woods survey, agreed that overall it was a good assessment of the industry's position and outlook, although representatives of the companies treated individually in the report each took issue with some of the statements concerning his company. This is natural, as Woods analyzes, as is the fashion hedged in spots. The hedging now seems to be justified in assessing the industry's present position. It is extremely doubtful that many of the companies listed above will achieve the sales figures estimated. The reason is simple

shortages of materials. There is still an outside chance that a last-quarter report may pull the 1946 sales up to expectations. Late shipments furnish at least that hope.

Number one shortage all along has been in aluminum (which has been reported in full previously by AVIATION NEWS). Now, the bright spot in Henry Kaiser's plant at Spokane, Wash. During the war, this plant is reported to have had a capacity of 30,000,000 lb. per month. Since Kaiser leased the plant from the government, after a slow start, production has been pushed up to about 4,000,000 lb. per month. That is all about quantity up markets. Kaiser reportedly has decided that the furnished aircraft industry is the best bet and intends to concentrate on supplying its needs for orders similar to B-25 and B-26.

The industry's pessimism needs for this aluminum is estimated to be in the neighborhood of 10,000,000 lb. per month. On the basis, the Kaiser plant alone should be close to meeting aircraft needs by the end of the year. For another thing, the long-time burnout of the industry as far as aluminum is concerned—the demand for the metal as housing—is also clearing up. The Reynolds Metal Co. plant at Chicago has turned to supplying the market and is believed to have the requisite capacity to handle the job.

Offering hope of an eventual curbing of another worry, but less serious shortage—that of frac-

DOUGLAS AD-1^{*} Skyraider



* AD-1 operator: Attack-Douglas Model No. 1. * The new, powerful, fast Douglas Skyraider is the premier fighter of 1946-47.

CHOSEN TO REARM THE NAVY'S POST-WAR CARRIER FLEET

• Outstanding characteristic of the Douglas AD-1 is its great load capacity: it carries 6,000 pounds of bombs, rockets, torpedoes, fire bombs, radar units or extra fuel tanks... further... more than 50 mph faster... than any other dive-bomber in service.

The unprecedented performance of the Skyraider results from major refinements of design simplification and production teamwork.

For example—Douglas engineers made weight reduction a prime objective. Result, the AD-1 was completed at 1,800 pounds less than the Navy's acceptable weight, thus giving greater range and capacity.

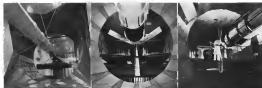
The Navy wanted the AD-1 in a hurry. The Navy got it—first design start to test flight in 30 months! Today a fleet of Skyraidere is taking shape on the production lines of the Douglas El Segundo Plant to equip the U. S. Navy with the safest, most versatile carrier-based plane of its great air arm. These Douglas cars again make the demand of the armed forces for a better airplane—in record time.

Such dependable performance, year after year, is the reason the Army and Navy—as well as the airlines—DEPEND ON DOUGLAS.

Douglas Aircraft Company, Inc.
Santa Monica, California



FREEBORN BIRD BRAINS
Another Douglas first, these new engines show the Skyraider to less than 100 mph in vertical climb. In addition, they contribute to superb control in maneuvering, fighting and landing.



NEW PROPELLER TESTING FACILITIES:

Hamilton Standard division of United Aircraft Corp. put into operation two new propeller test houses capable of holding props up to 30 ft. in diameter and striking for the first time adjustable air tunnels to smooth the flow of air through test cells. Completely being tested in the new cells are three new types of Hydrodynamic groups left to right, largest Hamilton prop ever built, with blades 30 ft. in diameter; a

square-tipped blade group, and a four-bladed Hydrodynamic for use on the Douglas DC-6 and which differs from the usual propeller in its wide, paddle-like tips. Left photo shows the adjustable air tunnel which is here expanded to its full 30 ft. in diameter. The long tube in the photos brings cooling air to the engine during the tests.



RAINBOW NUMBER TWO NEARS COMPLETION:

Production of the second XP-38 Rainbow long-range photo-reconnaissance plane for the AAF is well advanced at Republic Aircraft's plant at Farmingdale.

The prototype has been flying for some time, and work on the commercial version of the Rainbow is scheduled to get under way shortly.

Small horsepower electric motors — as the adoption of new standards by the National Association of Electrical Manufacturers. The effect of this is more or less indirect on the aircraft industry as the standards being put into effect apply primarily to motors for household appliances. But by reducing the number of specialized types of electric motors, manufacturers will be able to utilize mass production as a few types and be in a better position to serve the aircraft industry.

One segment of the industry has had little relief from shortages and, in fact, has had another bulk imported into an already critical situation. This is the lightplane industry which is still being tormented by a short supply of fabric, in spite of an ACPA-approved price increase. On top of that has been added Continental Motors Corp.'s difficulties with patents (Aviation News, Sept. 2). Continental is the largest supplier of

supplies in the lightplane industry and presumably the task of replacing the patents ordered removed by CMA had interfered with production schedules as there are reports from several manufacturers of airplanes awaiting engines.

Shortages in the lightplane industry become even more significant in the face of the estimate in the White, Wild survey that there are now about 200 companies either in, or planning to enter, the lightplane field. That means cutting an already very small pie into still more numerous scraps.

There is another, even more serious, aspect in the shortages incident as the smaller aircraft companies are concerned. The estimated working capital of the 14 large companies listed in the White, Wild survey is in excess of half a billion dollars. This plus the multi-faceted orders which all these companies hold, enables them to maintain practically full working staffs for a long period without danger

even though deliveries should be delayed because of shortages. But the smaller companies, with far less working capital, and now banking on sales to commercial outlets for future existence, have in some cases suffered dire hardship by delivery delays due to shortages.

Some of these companies have left on full staffs with the hope—that has not yet been fulfilled—that shortages would clear up soon.

British Are Building Big Research Center

An \$10,000,000 aircraft research center which will include more than a dozen wind tunnels is under construction near Bedford, England. Plans call for part of the National Aeronautics Establishment to be in operation late in 1942. Most of the tunnels will not be ready until 1942.

The first tunnel expected to function will be a 3 ft. by 3 ft. supersonic tunnel able to simulate a speed of 1,500 mph. This tunnel will be built partly with captured German equipment. Another supersonic tunnel will have a working diameter 5 ft. by 5 ft.

Among other tunnels will be one producing low turbulence air flow for the testing of airfoil sections, and a spinning tunnel with a sweep diameter of 15 feet.

The research center will also include an airfield runway-linked with two other nearby fields. There will be a laboratory for running structural tests on aircraft.

Headed the center will be W. G. Perier, at present a director of the Royal Aircraft Establishment. Personnel is expected to number about 3,000, 1,000 of which will be scientific and technical.



PIPER WINGS:

Wings for Cub trainers and superchargers are all metal excluding spars except for wooden boxes at tips. Side nose joined together from small pieces, later may be made in one-piece stampings.

PRIVATE FLYING

Waco Enters Postwar Plane Market With Aristocrat Pusher

Usual design of four-place personal plane features two-control system, non-splaisable c/g and 215 hp Franklin engine turning prop at tail by extension drive shaft.

By ALEXANDER DESURELY

The first two-control non-splaisable personal plane in the four-place class is being announced this week by Waco Aircraft Co., Troy, Okla., as its postwar entry into the personal plane competition after a history of 33 years of airplane building, most of it sold. World War II is the classic personal plane category.

The new Waco, which has been threatened the Aristocrat, is priced at \$14,000. It features a two-control system in the placement of its propeller at the tail hauled by an extension shaft running the length of the plane, thus the 215 hp Franklin six-cylinder air-cooled engine is the sole.

High-wing monoplane—Although tail propeller have been flown previously in the Douglas Mustang, the XP-48 bomber and in the Lockheed Big Express four-place experimental plane and are designed, reportedly, in a similar Douglas executive transport and a Consolidated-Vultee experimental lightplane, the Waco Aristocrat is the first personal plane with a tail propeller definitely scheduled for mass production.

The plane is a high-wing monoplane, with a rectangular wing which resembles the Republic Seabee wing design, having single streamlined wing-struts as a brace. Wings, ailerons, horizontal stabilizer, over rudder and fuselage are all-metal. The fuselage is of welded-steel tube construction, flame-protected.

Top speed at sea level is estimated at 154 mph, while the plane is expected to cruise at 5,000 ft. at 152 mph and to have a 50 mph stall speed.

The tail-propeller is described by the manufacturer as one of the most practical advancements in

personal plane design in more than a decade, because:

- ▶ Drag from the propeller slipstream, which detracts from efficiency of all conventional tractor-type airplanes is completely eliminated.
- ▶ The propeller location greatly reduces danger to the plane's occupants or to airport personnel.
- ▶ The situation of slip stream blowing back on the plane's occupants, as they enter and leave the aircraft is an added convenience.
- ▶ Cabin noise is greatly lessened by remoteness of the propeller.
- ▶ The company is obviously aiming the plane at the luxury class personal plane market, in which Waco has a formidable power competitor.
- ▶ Equipment listed — Standard equipment includes a two-way

radio, 80-in. diameter Hartzell controllable and reversible pitch propeller, air speed indicator, compass, sensitive altimeter and turn indicator, rate of climb indicator, clock, tachometer, oil pressure and oil temperature gauges, fuel pressure and fuel quantity gauges, vacuum, manifold pressure gauge, cylinder head temperature gauge, ignition switch and lock, instrument spotlights, dome light. All four seats are easily reached through either of the two wide doors, and the cabin is roomy enough for pilot and passenger to change seats in flight without difficulty. A 16 cu. ft. baggage compartment with 120 lb capacity, accessible from either in flight, or from outside door in landing, is another feature.

The cabin is fitted with dual control wheels, but rudder pedals have been eliminated. Rudder are coordinated with ailerons so that movement of the control wheel to right or left operates both control surfaces in a coordinated turn and bank, essentially similar in operation to the four-way two-control system. Moving the wheel forward or back for descent or climb, and turning it to one side or the other, are the only control features required. Non-splaisable characteristics of the plane are attributed to the general design, and to restricted movement of control surfaces.

▶ **Skierack Nosewheel**—The Aristocrat nosewheel is skid-type for landing, from the skid wheel a foot brake with equal braking



Aristocrat in flight. Aristocrat's drawing of the new four-place Waco Aristocrat as it will appear in flight, shows the unusual place of the propeller at the tail, corrected by sliding ailerons, rectangular high wing with single strut-brace, attractive grill, for engine-cooling, at nose.

on the two main wheels is located in the same relative position as an auto floor brake. Landing gear is a semi-retractable floatplane and weighs 1,000 lbs. The gear has low oscillation rate control and dampening characteristics for easy landing. The plane has a low center of gravity and a longer-than-normal wheel base due to the two-propeller location and the nose-wheel arrangement. Both there are additional devices making it easy to ground handling. The manufacturer claims it is virtually impossible for the plane to nose over on the ground, and that the low center of gravity permits cross wind drift landings of considerable severity, with safety.

The gear retracts into safety wheels, designed to make it possible for the aircraft to make a wheels-up landing and still use brakes and land without damage to plane or propeller.

Easy to Service.—The engine is installed so that it parts requiring servicing including both spark plugs on each cylinder are readily reached for check or replacement. The working is limited at the top of the air side hood, and is facilitated by four external fastener clamps. It is easy to see an automatic locking port, held by brass. Two rubber-rod type fuel lines are located in the wing roots, and feed by gravity to a fuel pump supporting the pressure carburetor. The pressure carburetor virtually eliminates the long hand crank common to most personal planes.

The *Arctostar* prototype has not yet made its maiden flight but is expected to do so early in October. The company plans to start first-stage deliveries from the Troy plant in February or March, 1947, assuming that the plane completes

| Waco 'Special' | | | |
|--|--------------------|-------------------|-------------|
| Specifications of the new four-blade Waco Arctostar floatplane | | | |
| Wingspan | 20 ft. 6 in. | Wt. | 1,000 lb. |
| Length | 17 ft. 6 in. | Wt. empty | 750 lb. |
| Wing area | 174 sq. ft. | Max. gross weight | 1,500 lb. |
| Max. speed | 135 mph. | Max. cruise speed | 110 mph. |
| Max. climb rate | 1,000 ft. per min. | Max. range | 1,000 miles |
| Max. altitude | 10,000 ft. | | |

its MC licensing requirements by that time.

Waco's power planes were marketed in many foreign countries as well as widely in this country, and had an excellent reputation for reliability and performance. Many of them are still in service. The company specialized in 4-5 place single-engine planes, many of them custom built. An ambulance plane, a military trainer for export to several South American countries, and one of the first tri-cycle gear planes, were among the last power Waco models.

The Model H tri-cycle gear plane was used by CAA in island landing experiments in Indonesia in 1942. The last power civilian Waco was a speedy retractable-landing gear five-place biplane, which had plowed wings and a 480 hp Wright Pratt R-1820 engine. It would cruise at 280 mph and was said to be the fastest plane in the country in its power class.

At the beginning of the World War II, Waco took national leader-

ship in the combat glides program, producing the eight-place CG-3 and the 15-place CG-4 and CG-4A, the big gliders used in the CG-13 glider, and the smaller CG-18. All these were designs of C. Francis Armer, vice-president in charge of engineering, and were first built at the Waco plant. Later the state gliders were built under license by a number of other manufacturers. The CG-4A was the first combat glider, and the most widely used in both European and Pacific theaters.

Armer is one part of a line—associated thru him with operations the relatively small, conservative Waco company. The others are Clayton D. Burchette, the president, and Hugh Perry, vice-president and general manager.

Survey Lists Florida Seaplane Facilities

Growth of private flyer's interest in seaplanes is indicated by a recent survey of the Florida State Department of Transportation. It lists 52 seaplane bases and anchorages in the state.

The survey points out that there are projects for installation of 21 additional Florida seaplane facilities, costing approximately \$5,000 each, including the National Airport plan, to complete the network of seaplane bases in the state, while 18 other facilities are to be improved under the federal plan.

With completion and improvement of the additional facilities it is estimated that seaplane facilities can carry almost any course they wish in the Florida area and be assured of adequate landing facilities. Of existing bases listed five are Navy and two are coast guard bases, available for civilian use only in emergencies.

The report concluded that the east coast of Florida now has a satisfactory network of seaplane bases and anchorages, as did central Florida as far north as Lake County, and the Florida west coast from Ft. Myers to the St. Petersburg-Tampa area. North Central and Northwest Florida still lack adequate facilities, which are to be supplied in the near future.

A directory of seaplane bases, bays and anchorages, with facilities available, is provided to accompany the survey, data for which has been obtained by the commission's survey, and from CAA and the U S Coast and Geodetic Survey.

NACA Bares Wartime Research For Lightplane Manufacturers

Noise reduction data, jet propellers, cleaned up designs, high lift devices and icing studies urged to improve planes.

Important technical advances in American personal aircraft may be made possible through research data opened to personal plane manufacturers by the National Advisory Committee for Aeronautics if the industry follows up on the wartime leads thrown out at a Langley Field (Va.), engineering conference last week.

These industry representatives who came to the NACA Langley laboratory expecting to have a complete lightplane research project developed program presented to them on a silver platter, were sadly disappointed. Actually what NACA offers is the by-product of its overall research program, the basic data that applies to the light-plane category of aircraft.

Radical Change Possible.—However the by-product may be important enough to make radical changes in conventional personal day airplanes if thoroughly applied. For the new NACA policy toward personal planes development has brought about competition of an order of 800 NACA technical reports, covering virtually every phase of basic aviation research, which has application to light airplanes. Admittedly a small portion of the total mass of data is known already to the industry in one form or another, but a considerable number of the reports have been only recently declassified from military secrecy and are available to industry for the first time.

Along with the index, and reports available to industry for the asking and with indications of a few major specific programs which the federal aviation research commission is carrying on, or projecting, the lightplane industry representatives were given frank notice by John Crowley, acting NACA research director, that only a major portion of the time would be devoted specifically to personal plane projects. NACA expenditures to high priority research projects for developing guided missiles and supersonic aircraft will come first. However Crowley pointed out that three per cent of NACA's basic research would

be generally applicable to lightplane design, as well as to larger aircraft.

In the specific personal aircraft projects, noise reduction, and jet propeller development seem to have first call.

These included probably most emphasis in a day of discussions which ranged from cleanup of engine cowling and other components to consideration of high lift devices, unweave research, propeller configurations, span and stall characteristics, icing, and many other design plane problems common to all aircraft.

Types Jet Study.—John Sanders, NACA Cleveland engineer, told the group that two forms of jet propellers warrant further study for possible future lightplane use. The jet-propeller which is driven by jets emitted from the blade tips, and the gas turbine driving a conventional propeller. Currently efficiency of the turbine-propeller stands at about 12 to 15 fuel per horsepower per hour, but he believes this can be reduced to 8 to 10 efficiency for the jet propeller is estimated at about 2 to 3.



Comparing Prop Noise.—Industry engineers listened last week at NACA's Langley laboratory to a comparison of noise made by a 75 hp. two-blade propeller mounted on the nose of a 45 hp. Puffin (Cub) fuselage (center), the same size propeller mounted on an electric motor (left), and two of the propellers on a tandem mounting which gave the effect of a four-blade propeller, also on an electric motor (right). The two-blade on the plane had a 100 Denbel noise rating, at 2160 rpm, with an 8.5 Mach number tip speed. Elimination of engine noise by the two-blade with equivalent electric power only dropped the sound level two decibels to 98. The four-blade however turned at only 1400 rpm to absorb the same power, with an 8.43 Mach number tip speed and an 81 decibel noise level. (NACA photo)

However he pointed out that the jet propeller which is a self-contained complete power installation, has a considerable advantage in weight over either the turbine propeller or the conventional power plant installation. The NACA has purchased experiments to make up one jet propeller, but has not yet test flown it, he said. A chart showed that the light weight of the jet propeller gave it an advantage for short flights over conventional power plants.

Administrator of Civil Aeronautics T. H. Wright, who is also vice-chairman of NACA, called upon the NACA engineers at the conference to continue their research on the jet power plants, as future personal plane power plants, because of the simplicity and lightness of the engines under study.

Prop Noise Reduced.—Propeller noise experiments indicated a statement by Arthur Barger that there was no reason why an airplane propeller could not be made as quiet as a helicopter rotor. He demonstrated the difference between sounds of a two-blade and an eight-blade propeller of the same diameter, by playing recordings. It was pointed out that reduction in diameter would not be desirable because of increased take-off run.

A chart showed that an eight-blade fan pitch would be equivalent to a two-blade fan pitch, but a two-blade of more blade pitch, but



Unique Design.—Rear aspects of the design of the new Waco Arctostar, shown in the above sketch, include retractable landing gear which will function on landing gear when retracted, propeller mounted on rear of main tail, with the propeller below the tailfeeder. How steps-up to door forward of strut-brace, may access to engine through air-tight door, outside door to fuselage baggage compartment.

that if the propellers had variable pitch, the right blades shown) a 4 percent shorter takeoff distance than the two-blade in addition to the noise reduction. The need often wound objection to the eight-blade propeller proposal for helicopters, its weight and complexity, was countered by a statement that individual blades in the eight-blade could be linked by means of less understood stress, and that a two-position pitch eight-blade propeller would be relatively simple to design. Canvases of industry engineers after the NACA session have been "brought in" to consider. "There must be some cover way to reduce propeller noise."

Demonstration of how the NACA had cleaned up 30 auxiliary planes by eliminating unnecessary drag items, was given to the conference with the implication that many of the manufacturers could have considerably faster and more efficient personal planes if they would follow this guidance. One service airplane, NACA reported, showed an increase of 30 mph in speed over its original 120 mph as a result of this streamlining.

Winging as Ice-Freeing—outflow that 180 local airports in general aircraft have been made in 1945 because of icing in industrial systems, Wilson Hunter, of the Cleveland NACA staff, pointed out that there had been no such case. He made several proposals, including incorporation of porous ear-buffers for small plane engines.

Other discussions covered sound stability and control, engine ball design, design of control systems, safety and spacing, use of low-drag airfoils for personal planes, jet centers for exhaust and quenching investigations on turbine engine configurations.

Harmon Choudhry, Washington, who has been assigned as coordinator of helicopter research projects at NACA, was introduced and discussed briefly plans for future projects, virtually all of them further developments of subjects already mentioned.

Texas Air Day

Nearly 1,800 private flyers and their parties were among visitors at Dallas, Tex., recently at the first Annual Texas Air Day. The program attracted 50,000 persons, including as they came: barbers, doctors, radio, beauty contests, addresses by civic and Army and Navy officials, and a show of 22 new civilian planes.

Briefing For Private Flying

WINDTUNNEL CLEANUP—NACA could probably make one of its quickest immediate contributions to improvement of personal planes, if it would make a list of the more promising existing planes, and subject them to full-scale wind tunnel testing to clean them out, systematically speaking. Whether NACA can or will take time out from its haphazardly speaking. Whether NACA can or will take time out from its haphazardly speaking. Whether NACA can or will take time out from its haphazardly speaking.

CONVAY ROADABLE—The four-place roadable plane being developed by Ted Bell for Convair-Corpus, and previously mentioned in "Aviation News," is now being tested. It is a four-place roadable plane. It is now being tested. It is a four-place roadable plane. It is now being tested.

METROPOLITAN AIR AUTHORITY—Cleveland Aviation Club is seeking establishment of a Cleveland Metropolitan Air Authority by state legislative action which could establish and operate airports in as few as ten cities in Ohio, as far east as Akron, Canton and Mansfield, Ohio, and as far west as the Pennsylvania state line. The road net across local government boundaries of municipalities and counties and coordinate operations of local airports and airports.

ENSENADA AIR TOUR—More than 1,000 flyers are expected to participate in the annual annual Ensenada (Mexico) Air Tour, starting Oct. 5 from Van Nuys, Los Angeles. Last year nearly 600 persons flew in a similar tour. Van Nuys Field will be point of entry, with customs officials available to facilitate border steps, and a landing field reservation at Ensenada for the air tour. An air show, tour of the city, harbor, and forest drive will be held at Ensenada. A navigation course will be a feature of the flight to Ensenada.

BETTER PLANE—Miami Air Race, already making plans for next January's three-day show, is planning to give exhibitions of personal planes a better break than they received at the recent Cleveland Race. Any manufacturer who wishes can exhibit as many different types of new planes as he chooses in the daily "display" without charge, as opposed to the \$500 per plane for charged manufacturers at Cleveland. Also space will be provided convenient to the grandstands, where the planes may be exhibited on the ground, and the spectators may inspect them more closely. Officials at Miami are hopeful they may have as many as 40 different planes entered, and expect the show plane show to be one of the biggest drawing cards at the Race.

LIGHTPLANE AERONAUTICS OUT—Personal plane manufacturers who are members of the Personal Aircraft Council, have unanimously agreed that they will no longer sponsor "best" performances of personal aircraft in aerobically demonstrations. Members decided that instead, they would concentrate on production of air tours and "flypasts" where the personal plane would be included as a means of transportation. Members decided that instead, they would concentrate on production of air tours and "flypasts" where the personal plane would be included as a means of transportation.

—Alexander McQuay

Bendix Scraps Plans To Make Lightplanes

Bendix Aviation Corp. last week laid off most of the employees of its personal airplane experimental division, at Detroit, except for a few key executives who may be assigned to other divisions. The layoff resulted from a reported decision of the Bendix board of directors to discontinue the division, and abandoned the company's projected entrance into the personal plane market.

The division which numbered about 50 engineers and approximately 125 shop workers, had already produced three complete planes resembling the low-wing, three-engine, three-place personal plane type depicted in recent Bendix advertisements. A four-place amphibian plane, almost completed, was to have flown in October. It was understood Bendix had expended approximately \$1,300,000 in the division.

Two members of the board of directors have been designated to dispose of the division's equipment, either removal of it as a unit. It is not definitely known what disposition will be made of the company plants, covering the whole plane design, but it is expected they will remain in the company.

The division had been a pet project of Elmer B. Bendix, former Bendix president, who left the corporation to become executive vice-president of Ford Motor Company. His successor, Melville Ferguson, reportedly did not share Bendix's enthusiasm for entering the personal plane market.

Other factors contributing to the decision were the fact that the division would place Bendix in competition with many other lightplane manufacturers who are customers of other Bendix divisions, and the fact that the corporation had been unable to locate a suitable manufacturing plant for the new division.

Mexican Lightplane Tour Is Postponed Until Oct. 12

Postponement of the Mexican Day Patrol Air Tour for private flyers until Oct. 12, has been announced by the Mexican government and the San Diego Valley committee at El Paso, Texas, which has been handling arrangements for American pilots. The

Wings Buzzing

More than a third of the 1,000 women flyers who were members of the WASP during World War II are now actively engaged in piloting, instructing and airport maintenance, according to a survey recently conducted by the Civilian Pilot Project, showing a continuation of the service pilot.

The survey shows that 340 are now actively in the civilian business. One example is the airport which two former WASPs, Charlotte Wain, and Margaret Gertrude Wain, have been operating since June 1946 at East Hampton, L. I. The field is doing a thriving, expanding business in flight instruction, charter and sightseeing flights. They are now preparing an air airport service area New York City.

Local campaigns to encourage the provision of small airfields and landing strips throughout Southern Africa. It also recommended the addition of all landing fees for light and ultra-light aircraft at all, other than international, national and intermediate, airports.



NAVION GETS NC

Supplying receipt of the CAA aerobically certificate for the four-place Navion personal plane, J. R. (Jack) Lindbergh, North American Division, Inc., president, changed the NC number to an NC number on the first certified Navion, while George W. Hildebrand, and H. J. Swisher, CAA's regional officials watch the proceedings, at the Indianapolis, Calif., plant.

to be covered in the committee's survey; (1) national transportation policy, and (2) transportation regulations, including the controversial issue whether there should be separate regulatory agencies for different modes of transportation.

Other major subjects to be covered: transportation financing, integration, or consolidation of ownership, taxation, federal aid to transportation, interstate business to commerce, the administrative structure, miscellaneous problems, such as action to promote technological progress in transport equipment, personnel relations, joint use of terminal facilities, etc.

The report, in the form finally approved by the Committee, presumably will be the basis for comprehensive transportation legislation to be initiated by House Interstate in the next Congress.

Admit Five Feedlines To Air Transport Group

Election of five feedlines to new membership in the Air Transport Association has brought the total membership of that trade organization to 34 regulars and three associates. The policy of admitting newly certified scheduled airlines to membership is a new one.

Lined members are Empire Air Lines, Inc., Lewiston, Idaho, Florida



PREREFL FLOWN

PCA recently carried this pre-authorized home, complete with furnishings, from Boston to Naples, where it was set up 20 miles after arrival as an exhibit at the Outdoor Western Sports Show. The "Sportman's Cabin" weighed 4,000 lb., with accessories and covered of one room and porch. It is the manufacturer

de (formerly Orlando) Airways, Inc., Orlando, Fla.; Monarch Air Lines, Inc., Denver, Southwestern Airways Co., Los Angeles, and E. W. Wagner Airways, Inc., Newwood, Miss.

U.S.-British Accord Binds Bermuda Pact

Five Air freedoms pledged in all future negotiation and open restrictive bilateral agreements to reciprocation.

An accord on international civil aviation policies which may overshadow in practical importance the agreement reached by the U.S. and Great Britain at Bermuda last February has been announced by the two nations following the recent London visit of an American delegation headed by CAAI Chairman James M. Lando.

Lando and the new understanding between England and the U.S. to follow the Bermuda principles of equalization, unrestricted capacity, unlimited frequency and the right to fly Europe traffic in negotiating all future air transport agreements with other countries. The Bermuda accord, Lando emphasized, had not been entered into to follow the principles there enunciated.

Back of the London discussions has been the tendency of Great Britain to negotiate bilateral deals which excluded features of conditions unfamiliar with the Bermuda pact. The British-Argentine bilateral, which provided for a 50-50 division of traffic, was especially objectionable to the U.S., Lando indicated, adding that British deals with Greece, France, Holland, Portugal and a half dozen other nations give cause for concern.

The CAB chairman admitted the U.S. also had not followed scrupulously the Bermuda principles but had tended to permit agreements containing even more freedom of the air than contemplated at Bermuda. Both Great Britain and the U.S. have now agreed to re-examine whether possible existing bilateral deals conform to the Bermuda accord.

Arrangements also have been suggested for establishing the machinery arranged in the Bermuda conversations for continuous consultation and exchange of views



REAL NOSE HANGAR:

The new \$1,000,000 hangar devoted above will be built by Eastern Air Lines at Miami for the accommodation of eight four-engine or twelve two-engine transports, as part of the carrier's expansion plan at the Miami airport. Of all-steel, hurricane-proof construction, the hangar will be three stories high, 450 ft. long and 240 ft. wide.

between the two countries as civil aviation problems. Lando's visit has been regarded as an important step in the history of civil aviation in London. Nigel Blackall, has been named Minister of Civil Aviation representatives with CAAI in Washington.

No Show Charge of 25% Voted for North Atlantic

Member airlines of the North Atlantic Traffic Conference of IATA have voted to impose a seven per cent refund for unused tickets not cancelled before takeoff. The "no show" charge would be 25 percent of the fare, with a \$50 maximum, and will become effective 25 days after all government authorities concerned have approved.

The conference, at its three-day session in Montreal, also adopted a standard Great Circle mileage table for computing rates and tariffs and gave preliminary approval to a standard ticket and waybill for all companies.

CAB Reopens Case

CAB has reopened the West Coast route case on the existing record for further argument and reconsideration of the portion of its decision which denied Western Air Lines' application to operate between San Francisco and Seattle. All other requests for re-opening, reargument and reconsideration were denied.

Two 'Copter Routes Asked for Los Angeles

Sketching the outline of what probably will be the first certified helicopter mail service in the country, the Post Office department and two applicants, Los Angeles Airways, Inc., and Southern Airways Co., presented evidence on proposed operations in the Los Angeles area at a recent CAB hearing.

Post Office Inspector Andrew E. Newton recommended that two circular routes based at the Los Angeles Municipal airport be set up along with a shuttle service between the airport and the Terminal Annex post office in downtown Los Angeles. Three flights daily—morning, noon and evening—would be operated on the circular routes, while hourly schedules would be maintained between the airport and the Terminal Annex.

The Post Office designated approximately 80 stops on the circular routes, but a total of 74 post offices would be served directly or indirectly.

Both Los Angeles Airways and Southern proposed always routes in their exhibits, listing their post stations on this type operation. The Post Office recommended a circular route will operate a system of supplemental routes by the two applicants this week, giving new cost data.

Active opposition to the helicopter operation in the Los Angeles area failed to develop. However, Western Air Lines took the position that a nationalized fund way operation such as Southern, which has been granted feeder routes in California and Oregon, should not be permitted to operate helicopter service also.



FRENCH TRANSPORT IN SERVICE:

The 23-seat French F-8-181 Lerchendorf shown above in service with Air France is the first French transport type in production since the Libelland. Construction is light alloy monocoque. All control surfaces are metal. Nose gear retractable. Power has four Gnome & Rhone 24 1/2 hp radial engines, 16 cylinders developing 1,500 hp per shaft. Speed is 160 ft. p. h., length 79 ft. 7 in., height 16 ft. 10 in., wing area 1,290 sq. ft. (British Cessna plane).

Cherone Belina, Los Angeles Airways president, told CAB Representative Ferdinand Merz that the company would use one Sikorsky S-31 and six Bell Model 47s, while Vice President James G. Day of Southern proposed service with six S-31s. Both companies indicated they favored use of automatic pickup devices to avoid landings where possible and to expedite service. Belina declined helicopter mail operations in Los Angeles may later be expanded to include distribution of air express, newspapers and merchandise.

Fuel Injection Boosts Constellation Payload

Increase in payload and cruising speed were seen to benefit from the increased efficiency of fuel injection engines as Pan American and TWA put Constellations with the improved power plants into service across the Atlantic.

Fuel saving was estimated at 3 to 4 percent, which was translated by Pan American to mean an increased payload of 180 lb. on long flights through decrease in fuel load, allowing room for four additional passengers across the Atlantic.

TWA and fuel injection, with a new supercharger, would increase cruising speed 20 mph, making it about 340 mph, when return of cabin pressurization in the last October or first of November meant the Constellations again ran at high altitudes. Both carriers noted another major performance, reduction in vibration, easier starting and a lowered noise level.

The first of TWA's Constellations

modified in accordance with CAA requirements and also equipped with fuel injection engines, flew to Paris late this month after proving runs. Pan American's also flew the Atlanta and plans were to put similar equipment on the Pacific Constellations.

PAA, which instituted its fuel injection program a year ago, had a conversion schedule on which the completion date, originally set for next July had been set back to October, 1946. Acceleration of the program meant that additional fuel injection Constellations are entering scheduled operation each week.

TWA was to receive five more of the modified planes last week and expect another every four or five days. An additional 12 new ones from the Lockheed plant are expected early in October.

Airline Service Suspension Is Approved by CAB

Suspension of airline service at Clarkburg and Morgantown, W. Va., by TWA, PCA and American Airlines has not been in violation of the Civil Aeronautics Act and was justified by safety considerations, CAB ruled last week. The Board's decision upholds recommendations made by a Board examiner early last spring.

CAB found that the marginal condition of the airport at Morgantown and Clarkburg, the existence of considerable turbulence and the land contour in the vicinity of the airports made the suspension of service the safety standpoint. PCA is authorized to Clarkburg and Morgantown on AM 55, American to Clarkburg on AM 54, and TWA to Morgantown on AM 61.

The Board temporarily authorized PCA to serve Elkins, W. Va., as an intermediate point between Clarkburg and Charleston, W. Va., as long as conditions at Henrich airport permit resumption of operations to Clarkburg.

New Coach Service

The Fiske Co., Louisville, Ohio, reports that the next 98 days will find its Zipperliner Airporter Coach Coach, (DAYTON News, July 15) in operation at least one major airport, including Chicago, Los Angeles, Detroit, New York, Philadelphia, St. Louis, Memphis, Atlanta and Miami. Others have ordered the coaches,



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